

## CLAIMS

1. An automated storage system comprising:
  - a data access drive operable to read and write computer-readable data on storage media;
  - a drive controller provided at the data access drive;
  - computer-readable program code provided in computer-readable storage at the data access drive, the computer-readable program code for generating drive information and user interface rendering data; and
  - a user interface module outputting the drive information via a user interface in accordance with the user interface rendering data.
2. The system of claim 1 wherein the computer-readable program code includes a render engine to generate the user interface rendering data.
3. The system of claim 1 wherein the computer-readable program code includes a state machine to retrieve the drive information.
4. The system of claim 1 wherein the drive controller retrieves updated drive information if a data access drive changes state.

5. The system of claim 1 further comprising a communication path established between the drive controller and the user interface module, the drive information and the user interface rendering data provided to the user interface module via the communication path.
6. The system of claim 5 wherein the communication path is established separate from a data path with the drive controller.
7. The system of claim 1 further comprising a communication path established between the drive controller and a system controller and between the system controller and the user interface module, the drive information and the user interface rendering data provided to the user interface module via the communication path.
8. The system of claim 1 wherein the drive information and the user interface rendering data is displayed in a graphical user interface.
9. The system of claim 1 wherein the drive controller retrieves updated drive information based at least in part on input from the user interface module.
10. The system of claim 1 wherein the drive controller receives control instructions from the user interface module.

11. A method comprising:  
receiving drive information and user interface rendering data from a drive controller at a data access drive;  
outputting the drive information in a user interface in accordance with the user interface rendering data.
12. The method of claim 11 wherein receiving the drive information and the user interface rendering data is via a system controller.
13. The method of claim 11 wherein receiving drive information and user interface rendering data is via a separate communications path.
14. The method of claim 11 further comprising displaying the drive information in a graphical user interface in accordance with the user interface rendering data.
15. The method of claim 11 further comprising determining a drive state of a data access drive, the drive information including the drive state.
16. The method of claim 11 further comprising receiving input at the drive controller from the user interface.
17. The method of claim 16 further comprising outputting updated drive information after receiving input from the user interface.

**18.** In an automated storage system having a graphical user interface including a display and a user interface selection device, a method of providing and selecting from the display comprising:

receiving drive information and user interface rendering data from a drive controller at a data access drive in the automated storage system; and

displaying the drive information in an application window in accordance with the user interface rendering data.

**19.** The computer system of claim 18 wherein the method further comprises receiving user input associated with a selection in the application window.

**20.** The computer system of claim 18 wherein the method further comprises displaying updated drive information in the application window if a drive state changes.